

## Abstract

A layer system is provided having a silicon layer (11), on which at least regionally a passivating layer (17) is  
5 superficially deposited, the passivating layer (17) having a first, at least largely inorganic partial layer (14) and a second, at least largely polymer partial layer (15).

Furthermore, a method for producing a passivating layer (17) on a silicon layer (11) is provided, there being produced, on  
10 the silicon layer (11), a first, inorganic partial layer (17), and on this a second, polymer partial layer (15), which form the passivating layer (17). The production of the intermediate layer occurs in such a way that the intermediate layer in its surface area adjoining the first partial layer (14) is  
15 composed as the first partial layer (14) and in its surface area adjoining the second partial layer (15) is composed as the second partial layer (15) and that the composition of the intermediate layer passes over, continuously or in steps, from the composition corresponding to the first partial layer into  
20 the composition corresponding to the second partial layer. The layer system provided or the method provided are particularly suitable in the production of self-supporting structures in silicon.

25 Figure 1